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A Safeguards Program to Implement DOE Requirements

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INTRODUCTION

The Department of Energy issued a new Material Control and Accountability (MC&A) Order 5633.3 in February of 1988. This Order contains all of the requirements for an effective MC&A (safeguards) program for facilities that control and account for nuclear materials in their operations. All contractors were expected to come into compliance with the Order by April 30, 1989 or obtain approval for exceptions and/or extensions. The Order also contains various performance requirements that are not in effect until the DOE issues the guidelines to the performance requirements.

After evaluations were completed in February 1989, it was determined there were several deficiencies in the Laboratory safeguards program. Documentation of policy and procedures needed correction before the Laboratory could be in compliance with the new MC&A Order. Differences between the old and new Orders were addressed. After this determination action teams were established to correct the Laboratory safeguards program. Compliance with the DOE requirements was the goal of this activity. The results of the action teams is the subject of this paper.

ELEMENTS OF THE SAFEGUARDS PROGRAM

An essential ingredient of an effective safeguards program is a well designed policy stating the goals and

intentions of the program. The first step of the corrective action teams was to write a new MC&A Plan addressing all the requirements contained in the new Order. The second element in the program is a procedural handbook which provides guidance as to how the program as stated in the plan is to be implemented. The action teams designed and wrote this handbook. Essentially the handbook provides all the necessary guidance the nuclear material custodians need to comply with the stated policy in the MC&A Plan. Compliance with this stated policy should guarantee compliance with the DOE requirements. The third element of the Laboratory program is the MC&A training program which addresses all the instruction necessary for custodians, nuclear material handlers, and measurement personnel. One of the primary responsibilities of the action teams formed in February was to focus on documentation of the first and second elements of the program. The third element of training has been addressed by formalizing and documenting many existing elements of training including custodian training, automated accountability training, criticality safety training, and measurement training. A comprehensive MC&A training program is the long range goal of the Laboratory. Other issues addressed by the action teams were the Laboratory tamper indicating device program and the internal assessment program. Both of these programs have been implemented.

Experience implementing the safeguards program at the Laboratory has revealed several difficult areas in the DOE

requirements. These areas are the categorization of materials in the graded safeguards table, shipping-receiving plans, tamper indicating device program, and the internal assessment program. There have been many discussions with DOE personnel about interpretation of some of the requirements. It will take more experience to smooth out all the details of compliance with the requirements.

CONCLUSION

It has not been trivial to implement a program that is in compliance with the requirements of DOE MC&A Order 5633.3. The overall program has a multitude of elements and each element must be effective to provide the needed safeguarding of all the nuclear materials handled at the Laboratory. First, a program has to be designed to address all requirements. Second, the program must be implemented in an effective manner. Finally, there must be assurance that the program once implemented is in compliance with the requirements of the DOE. In order to provide this assurance at the Laboratory a special safeguards assurance office was established and has the responsibility of assessing the program continually. With more experience the success of this program will be evaluated.